

2006 International Building Code City of Tucson Amendments

Section 101.1 Title. INSERT: [name of jurisdiction] as “City of Tucson”.

Section 101.4.1 Electrical. REVISE section by DELETING “ICC Electrical Code” and REPLACING it with “2005 NFPA70: National Electrical Code as amended by the City of Tucson”.

Section 101.4.2 Gas. AMEND first sentence to read: “The provisions of the *International Fuel Gas Code* and the *2006 Uniform Plumbing Code*, as amended by the City of Tucson, shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code.”

Section 101.4.4 Plumbing. DELETE section in its entirety and REPLACE as follows:

Section 101.4.4 Plumbing. The provisions of the *International Plumbing Code* or *Uniform Plumbing Code*, as amended by the City of Tucson, shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

Section 101.4.6 Fire Prevention. REVISE section by DELETING the paragraph and REPLACING it with the following:

The provisions of the *International Fire Code* shall apply whenever referenced in this code or as deemed necessary by the Building Official. Enforcement of the Fire Code shall, however, be relegated to the fire jurisdiction having authority or to the designated responding fire department.

ADD new Sections 101.4.8, 101.4.9, and 101.4.10 as follows:

Section 101.4.8 Outdoor Lighting. The provisions of the City of Tucson/Pima County Outdoor Lighting Code shall apply to all new construction and major additions to land uses, development, buildings and structures.

Section 101.4.9 Existing Buildings. The provisions of the *2006 International Existing Building Code* shall apply when approved by the Building Official.

Section 101.4.10 Performance Engineering. The provisions of the International Code Council Performance Code shall apply when approved by the Building Official.

Section 104.10 Modifications. REVISE section by ADDING the following to the end of the paragraph:

“Request for modification shall be appealed to the Building Official as follows:

1. The applicant shall file a written appeal on the form provided by the Building Official and accompanied by a non-refundable fee (refer to the fee schedules adopted by the jurisdiction by separate ordinance).
2. Adequate information shall be provided by the applicant to fully describe the
3. The appeal will be considered by the Building Official within five (5) business days of receipt.
4. If an appeal is denied by the building Official, the appellant must comply with the Decision or may appeal to the Board of Appeals pursuant to Section 112 of this Code.

Section 105.1 Required. AMEND section by ADDING the following sentence to the end of the paragraph to read:

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the Building Official and obtain the required permit. *See amendments to section 3303 for demolition permit requirements.*

Section 105.1.1 Annual Permits. REVISE section by ADDING the following to the end of the paragraph:

The applicant for the registered plant annual permit shall be an architect or engineer registered and residing in the State of Arizona and who shall be directly responsible for compliance with this code with respect to all work which would otherwise require a permit. All new applications shall be approved by the Building Official and be accompanied by a complete set of plans of affected buildings with a scope of work and operations section clearly outlined. Annual registered plant permits shall not be granted for buildings or facilities not currently operating under a valid Certificate of Occupancy.

Fees for annual permits shall expire on December 31st of each year and shall be renewed and approved for registered plant status to be maintained. The permit will be suspended if the registered plant no longer employs the approved applicant. If this occurs, the plant shall notify the Building Official and call for immediate inspection of any ongoing work until such time that a replacement registrant is approved by the Building Official. The Building Official may revoke an annual permit at any time for failure to comply with the annual permit requirements.

A summary report of all work done under the registered plant shall be prepared by the registrant and submitted annually to the Building Official. Work conducted under the registered plant annual permit may be reviewed and inspected by the Building Official while the work is in progress or on an annual basis.

The following work shall not be covered within the scope of the annual permit and shall require separate permitting:

1. Any work creating a different occupancy group for all or any portion of a building.
2. Any work creating a different building type for all or any part of a building.
3. Any work that adds, alters, removes or penetrates rated fire or smoke control assemblies, exit courts, exit passageways or horizontal exits.
4. Any work that provides for the relocation of more than five sprinkler heads.
5. Any work that modifies load bearing structures.

Section 105.2 Work exempt from permit (Building). REVISE the building section by ADDING new items 14 to 17 as follows:

14. Any work accomplished under the auspices of and owned and controlled by the United States of America or the State of Arizona.
15. Amusement devices or structures located on a site for no more than 30 calendar days.
16. Tents or membrane structures provided the area does not exceed 400 square feet or 900 square feet if a minimum two sides are open.
17. Re-roofing of existing buildings with similar materials regardless of value.

Section 105.2 Work exempt from permit (Electrical). REVISE the electrical section by ADDING a new fourth paragraph as follows:

Other items:

1. Power for amusement devices and carnival rides in place on site for less than 30 calendar days and not connected to a utility company's facilities.
2. Repair or replacement of fixed motors and transformers of the same type and rating in the same location.
3. Temporary decorative lighting.
4. Repair or replacement of current-carrying parts of any switch, contactor, control device, or overcurrent device of the required capacity in the same location.
5. Electrical wiring, devices, appliances, apparatus or equipment operating less than 25 volts and not capable of supplying more than 50 volt-amps.

Section 105.2 Work exempt from permit (Mechanical). REVISE the mechanical section by ADDING new item number 8 as follows:

8. Replacement of evaporative coolers with like coolers.

Section 105.3 Application for permit. REVISE section by ADDING new items 8 and 9 as follows:

8. Identify the name of the person or contractor who will perform the work.
When a licensed contractor is required by A.R.S., identify the license number or state the exemption of A.R.S. 32-1121 claimed which exempts the requirement for a licensed contractor to do the proposed work.
9. Give the assessor's parcel number and such other data and information as may be required by the Building Official.

Section 105.3.2 Time Limit of Application. DELETE in its entirety and REPLACE as follows:

Section 105.3.2 Time Limit of Application. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. An application shall not be extended more than once. An application shall not be extended if this code or any other pertinent laws or ordinances have been amended subsequent to the date of application. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

Section 105.5 Expiration. DELETE section in its entirety and REPLACE as follows:

Section 105.5 Expiration. Every permit issued by the Building Official under the provisions of the technical codes shall expire by limitation and become null and void, if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefor shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

A permittee holding an unexpired permit may apply for an extension of time within which work may commence under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee for a period not exceeding 180 days upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. Permits shall not be extended more than once.

Section 106.3.4.1 General. REVISE section by ADDING new text between the existing first and second paragraph as follows:

An engineer or architect registered in the State of Arizona shall be required for all design work with the exception of International Residential Code structures meeting prescriptive provisions of the code.

Exception: Electrical services exceeding 400 amperes, single phase, or 225 amperes, three phase, or where the fault current exceeds 10,000 amperes, shall require a registrant.

ADD new Section 108.3.1 Model plans:

Section 108.3.1 Model plans. When two or more buildings of Group R-3 or U Occupancy, or swimming pools, are to be built from a single model plan, without substantial modification as defined by the Building Official, and the said model plan is submitted by any one agency within a period of 12 months following the approval of said plan by the Building Official, then the plan review fees for each model plan shall be paid plus a fee for each additional exterior design elevation (refer to the fee schedules adopted by this jurisdiction by separate ordinance).

A model plan approved by a jurisdiction having an Intergovernmental Agreement with the City of Tucson may be accepted by the Building Official and assessed an administrative fee of 25% of the building plan review fee.

Section 108.4 Work commencing before permit issuance. REVISE section by ADDING a new sentence at the end of the paragraph as follows:

The additional fee shall be at least equal to the required permit fee.

ADD new Section 108.5.1 to read:

Section 108.5.1. Plan Review Fees. When submittal documents are required by Section 106.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be in accordance with the fee schedule adopted by this jurisdiction.

The plan review fees are separate fees from the permit fees specified in Section 108.2 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 106.3.4.2, an additional plan review fee shall be charged in accordance with the fee schedule adopted by this jurisdiction.

Section 108.6 Refunds. DELETE section in its entirety and REPLACE as follows:

Section 108.6 Fee Refunds. The Building Official may authorize refunding of a fee paid hereunder, which was erroneously paid or collected.

1. The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
2. The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an applicant for a permit for which a plan review fee has been paid is withdrawn or cancelled before any examination time has been expended.
3. The Building Official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

ADD new Section 110.2.1. Posting as follows:

Section 110.2.1 Posting. The Certificate of Occupancy shall be posted in a conspicuous place and shall not be removed except by the Building Official.

Section 110.3 Temporary Occupancy. Add new paragraph as follows:

The Building Official shall determine by inspection that the structure appears safe for temporary occupancy. The temporary certificate of occupancy shall be for a period of 30 days, with the possibility of extensions if satisfactory progress is being made to complete the work. Written assurance of compliance with this code and the temporary occupancy time limit shall include a cash bond or a performance bond in the penal sum of one thousand dollars (\$1,000.00) or the amount equal to one percent (1%) of the value determined pursuant to Section 108.3, whichever is greater, but not to exceed ten thousand dollars (\$10,000.00), payable to the jurisdiction and executed by a surety company qualified to execute surety bonds in the State. Each surety bond shall be joint and several and conditioned that the principal in the bond will faithfully conform to this code for which the temporary occupancy authorization is to be issued. The principal and surety named in such bonds shall be jointly and severally bound unto the jurisdiction and to any and every other person aggrieved or damaged by any breach of the condition of the bond. The bond shall not be void upon any recovery or recoveries totaling less than the whole penalty but may be used and recovered upon from time to time until the whole penalty is exhausted. The term of the obligation of such bond shall be for the period that the temporary certificate of occupancy is outstanding and may be held for thirty days thereafter when required by the Building Official, except that if at the expiration of said thirty days the jurisdiction has reason to believe that there is an action or claim impending, or that there is a legal action pending which relates to the bond, the jurisdiction shall retain the bond until final disposition of such matter or matters.

Exception: Owner-built, owner-occupied, single family dwelling.

ADD new Sections 110.4.1, 110.4.2, 110.4.3, 110.4.4 as follows:

Section 110.4.1 Notice of Hearing. Except as provided by section 110.4.3, no Certificate of Occupancy shall be revoked prior to ten (10) days after delivery to both the owner and occupant of written notice of intent to revoke said Certificate of Occupancy. During this 10-day period the owner and occupant may appeal the decision to the Advisory Appeals Board. The Building Official shall schedule the hearing within fifteen (15) days after receipt of the appeal and payment of the fee prescribed in the Development Services fee schedule. The Board may affirm, modify, or reverse the Building Official's action. A decision of the Advisory/Appeals Board, made at a duly scheduled and publicly noticed meeting, unless otherwise stated by the Advisory/Appeals Board in the body of said decision, shall be final. No further appeal is available to City boards or officials. Persons aggrieved by final decisions of the Advisory/Appeals Board must file their appeals in Superior Court.

Section 110.4.2 Posting. In addition to the delivery of the notice to revoke the Certificate of Occupancy, a copy thereof shall be posted in a conspicuous place on the outside of the premises concerned.

Section 110.4.3 Immediate Hazards. If, in the opinion of the Building Official, an immediate hazard to life or limb exists in any occupancy for any reason, the Certificate of Occupancy may be revoked immediately and such shall be accomplished when notice is given the person in charge of the premises. After such revocation, the owner or occupant may set the matter for hearing with the Advisory/Appeals Board in accordance with Section 112.

Section 110.4.4 Utilities. Upon revocation of the Certificate of Occupancy, utility connections for the premises involved shall be disconnected or discontinued by the utility company when ordered by the Building Official until the Certificate of Occupancy is restored.

ADD new Section 111.1.1 as follows:

Section 111.1.1 Service conductors. All service conductors, power and communication, shall be installed underground for all new construction. The requirement for underground conductors may be waived by the Building Official where:

- A. Existing buildings on the block are served with overhead conductors.
- B. The installation, when compared to the use of the overhead conductors, would create a hazard or not be feasible. A feasibility study will be required at the time the request for waiver is made.

Section 111.2 Temporary connections. Add a second paragraph as follows:

The Building Official shall determine by inspection that the structure appears safe for temporary connection of building service equipment to the source of energy, fuel or

power for the period of time requested by the permittee. Written assurance of compliance with the Administrative Code, the applicable technical codes, and temporary connection time limit shall include a cash deposit or a good and sufficient bond in the penal sum of one thousand dollars (\$1,000.00) or the amount equal to one percent (1%) of the value determined pursuant to Sec. 304(a), second paragraph, whichever is greater (not to exceed \$10,000.00), payable to the jurisdiction, executed by a surety company qualified to execute surety bonds in the State. Each such bond shall be joint and several and conditioned that the principal in the bond will faithfully conform to the Administrative Code and to the technical codes applicable to the building or structure or building service equipment for which the temporary connection authorization is to be issued. The principal and surety named in such bond shall be jointly and severally bound unto the jurisdiction, and to any and every other person aggrieved or damaged by any breach of the condition of the bond. The bond shall not be void upon any recovery or recoveries totaling less than the whole penalty but may be used and recovered upon from time to time until the whole penalty is exhausted. The term of the obligation of such bond shall be for the period that the authorization is outstanding and may be held for thirty days thereafter when required by the Building Official, except that if at the expiration of said thirty days, the jurisdiction has reason to believe that there is an action or claim impending or that there is a legal action pending which relates to the bond, the jurisdiction shall retain the bond until final disposition of such matter or matters. No bond shall be required under the provisions of this paragraph if for the building or structure concerned there is a Temporary Certificate of Occupancy issued and outstanding.

Exception: Owner-built, owner-occupied, single-family dwelling.

ADD new Section 111.2.1 as follows:

Section 111.2.1 Construction power. Construction power is a privilege granted under the jurisdiction for convenience during construction. Construction power may be from either temporary power poles or through the permanent power panel. A surety bond will not be required for construction power except in cases where the construction has been previously revoked. Each 120 volt circuit used for construction power shall be GFCI protected. Construction power may be revoked at any time for:

- A. Suspension or abandonment of the work per Section 105.5 or 105.6.
- B. Tampering with the electrical service panel in violation of the National Electric Code and the power company requirements.
- C. Use of construction power for temporary or permanent occupancy.
- D. Failure to protect each energized 1220 volt circuit with a ground fault circuit interrupter.
- E. Failure to properly close-off all openings in the panel box and enclosure panel.
- F. Failure to make corrections to other work as required in the technical codes.
- G. Creating dangerous or unsafe conditions.

Section 112. Board of Appeals. DELETE section in its entirety and REPLACE as follows:

Section 112 Appeals

Section 112.1 Administrative Appeal. Whenever a violation of any of the technical codes of this code is determined, whether during construction or at the plan review stage, and the applicant wished to appeal the decision of the staff because of code interpretation, unreasonable hardship, or other acceptable reasons, an appeal may be made to the Building Official in the following manner:

1. The applicant shall file a written appeal on the forms provided by the Building Official and accompanied by a non-refundable fee (refer to the fee schedule adopted by this jurisdiction by separate ordinance).
2. The appeal will be reviewed by the Building Official within ten (10) days of receipt of the appeal.
3. The Building Official may use a hearing committee consisting of such staff members as deemed appropriate, or other technical persons, to advise the Building Official on a particular appeal.
4. Adequate information shall be provided by the applicant in order to fully describe the conditions in question.
5. The applicant may, but is not required to, personally meet with the Building Official.
6. If an appeal is denied by the Building Official, the appellant must comply with the decision of the Building Official or appeal to the Advisory/Appeals Board pursuant to Section XXX of this code.

Section 112.2 Advisory/Appeals Board. The Advisory/Appeals Board shall hear appeals of orders, decisions or determinations made by the Building Official concerning the application and interpretation of the technical codes and may determine the suitability of alternate materials and methods of construction and to recommend modifications to the applicable technical code review committee.

Section 112.3 Advisory/Appeals Board Appeal. Any person who desires a review by the Advisory/Appeals Board may do so as follows:

1. An application for review shall be filed on forms provided by the Building Official and accompanied by a non-refundable fee (refer to the fee schedule as adopted by this jurisdiction by separate ordinance), not less than three (3) weeks prior to the regularly scheduled Advisory/Appeals Board Committee meeting. The three (3) weeks advance filing requirement may be reduced at the discretion of the Advisory/Appeals Board.
2. Adequate information shall be provided by the applicant in order to fully describe the conditions in question.

3. At the hearing the applicant may introduce evidence in support of his/her position.
4. Decisions and findings of the Advisory/Appeals Board shall be final and made in writing to the Building Official and the applicant. Decisions of the board shall be made by a majority vote of the members present, provided that a quorum shall consist of a majority of the board members appointed at the time of that meeting.

References to any “Board of Appeals” in the technical codes shall be construed to mean “Advisory/Appeals Board”.

Section 112.4 Court Review of Board Decision. A decision of the Advisory/Appeals Board, made at a duly scheduled and publicly noticed meeting, unless otherwise stated by the Advisory/Appeals Board in the body of said decision, shall be final. No further appeal is available to City or County boards or officials. Persons aggrieved by final decisions of the Advisory/Appeals Board must file their appeals in the Superior Court.

Section 113.1 Unlawful Acts. DELETE in its entirety and REPLACE as follows:

Section 113.1 Unlawful Acts. It shall be a civil infraction for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code and each day such violation continues shall constitute a separate offense.

Section 308.2 Group I-1. REVISE section by DELETING all occurrences of the number “16” and REPLACING them with the number “10”.

Section 310.1 Residential Group R. REVISE section R-4 as follows:

R-4 Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living Facilities including more than five, but not more than **10** occupants, excluding staff, who because of age, mental or physical disability, or other reasons, live in a supervised residential environment which provides care licensed by the Arizona Department of Health Services. Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

Section 903.2.2 Group E. REVISE section by DELETING in its entirety and REPLACING as follows:

An automatic fire sprinkler system shall be provided throughout all Group E Occupancies.

Exception: One story buildings when each room used for instruction has at least one exit door directly to the outside at ground level, and when rooms used for assemble purposes have at least one-half of the required exits directly to the exterior ground level, an automatic sprinkler system need not be provided.

Section 903.2.3 (Item 2) Group F-1. REVISE section by REPLACING the word “three” with the word “two”.

Section 903.2.6 (Item 2) Group M. REVISE section by REPLACING the word “three” with the word “two”.

Section 903.2.8 (Item 2) Group S-1. REVISE section by REPLACING the word “three” with the word “two”.

Section 903.2.10.1 Stories and basements without openings. REVISE section by REPLACING the first paragraph with the following:

An automatic sprinkler system shall be installed throughout every story of all buildings where the floor area exceeds 1500 square feet, and all basements regardless of size, where there is not provided at least one of the following types of exterior openings:

Section 903.2.10.3 Buildings more than two stories. REVISE the section by DELETING it in its entirety and REPLACING it as follows:

An automatic sprinkler system shall be installed throughout all buildings more than two stories or with a floor level having an occupant load of 30 or more that is located 55 feet or more above the lowest level of fire department vehicle access.

Exception: Open parking garages.

ADD new Section 903.2.10.4 as follows:

Section 903.2.10.4 Special amusements buildings (also see Section 411). Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. When the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means.

Exception: An automatic sprinkler system is not required where the total floor area of a temporary amusement building is less than 1,000 square feet and the travel distance from any point to an exit is less than 50 feet.

Section 903.3.1.1.1 Exempt Locations. REVISE section by DELETING item number **four** in its entirety.

Section 903.1.2.1 Balconies. REVISE section by DELETING all text after the first sentence.

Section 904.11.2 System interconnection. REVISE section by ADDING the following to the end of the first sentence:

“and to all electrical receptacles located within the perimeter of the protected exhaust hood.”

Section 1011.2 Illumination. REVISE section by ADDING the following sentence to the end of the first paragraph:

“Floor level exit signs: when exit signs are required, additional approved low-level exit signs which are internally or externally illuminated, or self-illuminated shall be provided in all interior corridors serving guest rooms of hotels in Group R-1 occupancies.”

ADD new Section 1610.1.1 as follows:

Section 1610.1.1 Presumptive active pressure. For typical unsaturated soils in Pima County, a presumptive active lateral pressure of 35pcf may be used without a geotechnical report. Level backfill is assumed with this active pressure. Surcharges shall be applied as necessary.

Section 1704.5 Masonry construction. REVISE section by DELETING Exception 2 and REPLACING with the following:

Exception 2: Nonessential facilities designed in accordance with Section 2107 with allowable masonry stresses reduced by one-half and the maximum value of f'_m limited to 1500 psi for concrete or clay masonry. The following limitations shall apply to this exception:

1. The unsupported height (or length)-to-thickness ratio of a building wall shall not exceed 20.
2. The soil retaining height for a retaining wall shall not exceed 4'-0" measured from the top of footing for an 8-inch-thick wall or 6'-0" for a 12-inch-thick wall.
3. The height-to-thickness ratio shall not exceed 10 for a cantilevered masonry fence or combination masonry fence and retaining wall as measured from the top of footing to the top of wall. If a combination fence/retaining wall consists of more than one wall thickness, the smallest thickness shall be used in determining the height-to-thickness ratio.

ADD new Section 1804.2.1 as follows:

Section 1804.2.1 Presumptive passive pressure. For typical unsaturated soils in Pima County, a presumptive lateral load-bearing capacity (passive pressure) of 250 pcf may be used without a geotechnical report.

ADD new Section 1804.3.2 as follows:

Section 1804.3.2 Presumptive coefficient of friction. For typical unsaturated soils in Pima County, a presumptive coefficient of friction for lateral sliding of 0.30 may be used without a geotechnical report. Friction resistance may be used in conjunction with passive pressure to resist sliding forces.

Section 1805.2 Depth of footings. REVISE section by DELETING the first sentence and REPLACING it with the following:

The minimum depth of footings below the undisturbed ground surface shall be 12 inches for 1000 psf maximum allowable foundation pressure and a minimum 18 inches for maximum allowable foundation pressure values of Table 1804.2.

Section 1805.5 Foundation walls. REVISE section by RETAINING the first sentence and DELETING the remainder of the section, sub-sections, and Tables 1805.5 (1) through 1805.5 (5).

ADD new Section 1901.2.1 as follows:

Section 1901.2.1 Allowable stress design. Structural Concrete may be designed in accordance with ACI 318-99 Appendix A: Alternate design method.

Section 1910.1 General. REVISE section by ADDING the following after the first sentence in Exception 5:

In the absence of a geotechnical report, vapor barriers are not required provided a minimum 4 inch aggregate base course is provided beneath the on-grade slab.

EARTHEN STRUCTURES

Table 720.1 (2) REVISE table by ADDING the following:

Material	Item	Construction	4 Hour	3 Hour	2 Hour	1 Hour
1a Earthen Walls	1a - 1.1	Solid wall construction utilizing earth as the structural wall	14	12	10	8

DELETE Sections 2109.8 through 2109.8.4.7, EXCEPT Table 2109.8.3.1 Allowable shear on bolts in adobe masonry, which shall be RENUMBERED Table 2114.6.B.

ADD new Section 2114 as follows:

Section 2114 Earthen Structures

Section 2114.1 General. Earthen structures with any site condition may be designed with accepted engineering practice for earthen wall structures and with the provisions of this section.

Section 2114.1.1 Earthen materials. This section shall establish minimum standards for safety for construction of earthen materials structures, collectively known as adobe, burnt adobe, rammed earth, and hydraulic pressed unit construction.

Section 2114.1.2 Professional registration required. Plans and specifications designed under the provisions of Section 2114 shall be prepared by a registered professional architect or engineer licensed in the state for which the project is to be constructed.

Section 2114.2 Minimum thickness. The minimum thickness of earthen structures shall be designed to limit tension to zero unless tensile reinforcement is provided. Walls shall be designed to meet forces prescribed by Chapter 16. The measurement of height of walls shall be the distance between points of lateral support. Wall thickness shall be measured from face to face of each wall with the. The thickness of walls using raked joints shall be the surface to surface distance of the mortar joints. The withes of wall sections shall not be combined without cross bonding of the masonry units throughout the structural element. Cross bonding shall mean overlapping of not less than 1/3 of the dimension of the masonry units.

Section 2114.3 Support conditions. Earthen structures shall be supported on a solid concrete, solid masonry foundation system the width of which shall be not greater than 1/6 inch narrower than the earthen structure which it supports. Earthen structures shall not be less than 6 inches above adjacent grade.

Section 2114.4 Corbeled wall elements. The maximum corbeled projection beyond the face of the wall shall not be more than 4 inches. Such corbeled projections shall add additional thickness to the wall, the opposite face of the wall remaining plane with the primary wall plane.

Section 2114.5 Moisture barrier. A moisture barrier equal to 30 lb. asphalt impregnated building paper, or equivalent moisture resistant barrier, shall be installed between the supporting foundation and the earthen material.

Section 2114.6 Allowable stresses. Allowable compressive, tensile and shear stresses in earthen structures shall not exceed the values prescribed in Table 2114.6.A. In determining the stresses, the effects of all loads and conditions of loading and the influence of all forces affecting the design and strength of the several parts shall be considered. Bolt values shall not exceed those set forth in Table 2114.6.B.

Section 2114.6.1 Combined units. In walls composed of different kinds or grades of units, materials or mortars, the maximum stress shall not exceed the allowable stress for the weakest of the combination of units, materials and mortars of which the wall is composed. The net thickness of any facing unit of earthen materials used to resist stress shall not be less than 3 inches (76 mm).

When dissimilar materials, (e.g. concrete masonry or steel) is used to support earth wall construction, such elements shall be structurally isolated from other earth wall elements. The design shall recognize, with specific detailing, the effects shrinkage of the earth wall construction may have on the structural integrity of the structure.

Table 2114.6.A
ALLOWABLE STRESSES FOR EMPIRICAL DESIGN OF EARTHEN WALL STRUCTURES

STRENGTH OF UNIT, GROSS AREA		ALLOWABLE STRESSES GROSS CROSS-SECTIONAL AREA	NOTE 1
Compression	300 psi	Normal Loading	30 psi
		Concentrated Loading	45 psi
Modulus of rupture	55 psi	Allowable Tension without tensile reinforcing	0 psi
Shear	N/A	With Special Inspection	8 psi
		Without Special Inspection	4 psi
Modulus of Elasticity	60, 000 psi	Allowable deflection	Less than 1/2%

For SI: 1 pound per square inch = 6.895 kPa.

Notes:

1. Gross cross-sectional area shall be calculated on the actual rather than the nominal dimensions.

Table 2114.6.B REFER to IBC Table 2109.8.3.1

Section 2114.7 Lateral support. Earthen walls shall be laterally supported in the vertical direction and at intersection with other earthen walls. Support at the top of the wall shall in accordance with one of the methods in Section 2114.7.1 or Section 2114.7.2.

Section 2114.7.1. Bond beams. A continuous bond beam system embedded in the earthen walls, designed to provide lateral support for the walls without the aid of additional bracing elements such as roof diaphragm. Bond beams of concrete or masonry shall be not less than the width of the wall minus 6 inches (xxx mm).

Section 2114.7.1.1 Bond beam anchorage. Bond beams shall be anchored to earthen walls at intervals of not over 48 inches (1219 mm) by a connection with shear strength of not less than the shear forces in both directions. The shear between a cast in place concrete bond beam and the earthen wall shall

not exceed $\frac{1}{8}$ the dead load at the base of the bond beam unless alternate attachment is provided compatible with the allowable stresses in Table 2114.4.A or Table 2114.4.B.

Section 2114.7.2 Roof Diaphragm. A roof diaphragm complying with other provisions of this code adequate to provide lateral support may be used to brace earthen walls. Anchorage shall be tie beams as specified in Section 2114.7.2.2 or other anchorage methods of equal strength.

Section 2114.7.2.1 Tie Beams. A tie beam is a beam built into the earthen wall for the purpose of anchoring the roof diaphragm and transferring the lateral perpendicular and parallel forces. Tie beams shall be provided for all earthen walls laterally braced by a roof diaphragm.

Section 2114.7.2.2 Tie beam anchorage. Tie beams shall be anchored to earthen walls at intervals of not over 48 inches (1219 mm) by a connection with shear strength of not less than the shear forces in both directions. The shear between a cast in place concrete or masonry tie beam and the earthen wall shall not exceed $\frac{1}{8}$ the dead load at the base of the bond beam unless alternate attachment is provided compatible with the allowable stresses in Table 2114.4.A or Table 2114.4.B.

Section 2114.8 Lintels. Earthen walls over openings shall be supported by steel lintels, reinforced concrete or masonry lintels or earthen material arches designed to support load imposed. Lintels shall not be supported by rigid structural columns, frames or posts with rigidities greater than the earthen wall unless the design allows for the potential for differential settlements. Small openings less than 12" may be constructed without structural lintels.

Section 2114.9 Shear walls. Earthen walls subject to in-plane loads shall be designed to be tension free unless tensile reinforcement is provided. Solid panels less than 4 feet (1219 mm) shall not be considered shear walls.

Section 2114.10 Opening jambs. Portions of walls between openings shall be constructed with lengths of not less than $1 \frac{1}{2}$ times the thickness of the wall in which they occur.

Section 2114.11. Freestanding piers. Piers independent of earthen walls shall be designed to support vertical and horizontal loads unless braced by other elements of the structure. Tensile reinforcement shall be provided where tension occurs. When structural posts or columns are provided within the pier ties or attachments shall be provided to the earthen wall system to laterally secure it.

Section 2114.11.1 Pier cap. A solid concrete cap shall be provided at the top of load bearing piers under all concentrated loads. The cap shall cover not less than 50% of the top pier.

Section 2114.12 Chases. Chases and recesses in earthen walls shall not be deeper than one-third the thickness of the wall thickness. The maximum length of a horizontal chase or horizontal projection shall not exceed 4 feet (1219 mm), and shall have at least 8 inches (203 mm) of earthen construction in back of the chases and recesses and between adjacent chases or recesses and at least 12 inches (305 mm) between the chase and the jambs of openings.

Chases and recesses in earthen walls shall be designed and constructed so as not to reduce the required strength or required fire resistance of the wall and in no case shall a chase or recess be permitted within the required area of a pier. Earthen walls directly above chases or recesses wider than 16 inches (406 mm) shall not be supported on non-combustible lintels.

Section 2114.13 Stack bond. When the earthen wall is constructed of units, (e.g. adobe brick), units shall not be laid in stack bond. Units shall, in all locations throughout the wall system, overlap the courses below by not less than one-third the dimension of the units.

Exception: Ornamental non-structural elements may be laid in stack bond if properly tied to the main structure.

Section 2114.14 Metal reinforcement. All walls shall be anchored at their intersections, at vertical intervals of not more than 16 inches (406 mm) with joint reinforcement of at least 9 gage when using earthen units (e.g. adobe block). Horizontal reinforcement shall be used throughout the wall system and be continuous at the intersections. Reinforcement used throughout the wall system shall be not more than 4 inches narrower than the wall thickness.

Section 2114.15 Veneer. All veneers using earthen materials shall be installed in accordance with this section. Such veneers shall be installed with a non-combustible foundation, over concrete masonry, a backing of wood or cold-formed steel and the veneer shall be not less than 4 inches (101 mm) or greater than 8 inches (203 mm) in thickness.

Section 2114.15.1 Anchorage. Earthen units shall be anchored to the supporting wall with a corrosion-resistant veneer tie system mechanically attached to continuous horizontal joint reinforcement continuously installed in the veneer bed joint not less than 16 inches (406 mm) on center vertically. When earth mortar systems are used the tie system shall prevent the accumulation of mortar at the base of the veneer. Conventional brick ties shall not be used to anchor earth units.

Section 2114.15.2 Air space. The veneer shall be separated from the sheathing by an air space of a minimum of 1 inch (25 mm) but not more than 2 inches (51 mm). A weather-resistant membrane of 15 lb. asphalt-saturated felt shall be

provided except when veneer is applied over concrete masonry or concrete backing.

Section 2114.15.3 Flashing. Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water into the building structural framing components. The flashing shall extend to the surface of the exterior wall finish and shall be installed to prevent water from reentering the exterior wall envelope. Flashing shall be located beneath the first course of veneer, and at other points of support, including structural floors, shelf angles and lintels. Approved corrosion-resisting flashing shall be installed at all of the following locations:

1. At top of all exterior window and door openings in such a manner as to be leak proof.
2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projections lips on both sides under stucco copings.
3. Under and at the ends of masonry, wood or metal copings and sills.
4. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
5. At wall and roof intersections.

Section 2114.15.4 Weep holes. Weep holes shall be provided in the outside with of masonry walls at a maximum spacing of 33 inches (838 mm) on center. Weep holes shall not be less than 3/16 inches (4.8 mm) in diameter. Weep holes shall be located immediately above the flashing.

Section 2114.16 Buttresses. Earthen walls used as buttresses shall not extend beyond an average length perpendicular to the wall to be braced a distance of 6 feet (1830 mm) without consideration to out-of-plane bending of the buttress.

Section 2114.17 Gable end walls. Gable end walls shall be constructed using veneer construction as required by Section 2114.15 or shall be provided with lateral bracing to prevent overturn.

Section 2114.18 Ledgers. Ledgers shall not be used to support vertical live and dead loads in excess of 75 lbs. per lineal foot unless the tension in the wall due to bending from out-of-plane loads and the eccentric load from the ledger is zero.

Section 2114.19 Material standards. The materials used in earthen wall structures shall comply with the following material standards. For each of the tests prescribed in these standards, five full size sample units shall be selected at random from each lot of units or fraction thereof produced. Mass wall systems such as Rammed Earth shall provide five tests for each required standard test series.

Section 2114.19.1 Manufacturers of earthen materials. Established manufacturers of earthen materials shall certify compliance with these standards. Copies of their periodic testing shall be supplied to the manufacturer to designers and users of earthen materials shall include the actual dimensions of units, not nominal dimensions.

Section 2114.19.2 Onsite earthen materials. Earthen units, mortar, rammed earth wall materials mined, mixed, formulated, and or, molded on site shall be tested for compliance with these standards. For individual structures, a set of tests shall be provided for the first 2500 square feet of wall and an additional test for each additional 2500 square feet or portion thereof in the structure. At least one set of tests shall be made for each structure and for each 2500 square feet of patio wall. The fabricator of the materials used in the project shall certify in writing to the Building Official compliance with these standards. The certification shall include the number of units site molded, size of the units, volume of material used as mortar, dates of fabrication, and results of testing of the material. If materials from established manufacturers and onsite materials are used in the project, copies of records including sources, quantities, and location of use within the structure shall be provided to the Building Official upon request.

Section 2114.19.3 Categories of earthen materials. Type I, II, III, and IV earthen materials are approved for use in construction of projects designed in accordance with Section 2114.

Exception: Type I adobe shall only be used for repairs and small additions in which new walls do not exceed 10% of the surface area of existing walls of Type I construction and for structures constructed of a similar material system and for projects requiring this class of materials to meet historic guidelines.

Section 2114.19.3.1 Required plaster veneer. Adobe of Type I and II shall be protected on the exterior with exterior plaster meeting the requirements of IBC Section 2512 applied over wire lath. Type I and II adobe shall not be used within 4 inches (102 mm) of the floor or at the top of parapet walls or near potential sources of water which may effect the stability of the earth wall system. Other Types of adobe may be left unplastered and may be used without separation from the floor.

Section 2114.19.3.2 Adobe units and mortar. Moisture resistant stabilized adobe units and mortar shall meet the following testing standards as indicated in Table. Type S portland cement mortar may be used for Type II, III, and IV adobe in lieu of earth mortar.

Table 2114.16.3.1

Material Type	Dry Compression 2114.16.3.1.1	Wet Compression 2114.16.3.1.2	Modulus of Rupture 2114.16.3.1.3	Absorption <2.5% 2114.16.3.1.4	Absorption <5.0% 2114.16.3.1.5	Moisture Content 2114.16.3.1.6
I	X		X			X
II	X		X		X	X
III	X		X	X		X
IV		X	X			X

X Indicates that material must pass the test standards prescribed in this Section.

Section 2114.19.3.3 Dry compression strength. Determine the compressive strength of the required number of samples as required by Section 2114.19 in accordance with the following procedures.

Section 2114.19.3.3.1 Dry the specimen. Dry the specimen at a temperature of 85° F. + -15° F. (29° C. + -9° C.) in an atmosphere having relative humidity of not more than 50 percent. Weigh the specimen at one-day intervals until constant weight is attained.

Section 2114.19.3.3.2 Cap the specimen. The specimen may be suitably capped with calcined gypsum mortar or the bearing surfaces may be rubbed smooth and true. Then calcined gypsum is used for capping, conduct the test after the capping has set and the specimen has been dried to constant weight in accordance with Item 1 of this section.

Section 2114.19.3.3.4 Testing equipment. The loading head shall completely cover the bearing area of the specimen and the applied load shall be transmitted through a spherical bearing block of proper design. The speed of the moving head of the testing machine shall not be more than 0.05 inch (1.27 mm) per minute.

Section 2114.19.3.3.5 Reporting results. Calculate the average compressive strength of the specimens tested and report this as the compressive strength of the block. Units shall have an average dry compressive strength of 300 psi (2068 kPa) and no individual unit may have a strength of less than 250 psi (1724 kPa).

Section 2114.19.4 Wet compression strength. Determine the compressive strength of the required number of specimen as required by Section 2114.19 in accordance with the following procedures.

Section 2114.19.4.1 Cap the specimen. The specimens may be suitably capped with a capping material compatible with water saturation or the bearing surfaces may be rubbed smooth and true.

Section 2114.19.4.2 Wetting the specimen. Submerge the specimen under water for not less than 8 hours or longer as required until fully saturated.

Section 2114.19.4.3 Test the specimen. Immediately test the specimen in the position in which the earthen unit is designed to be used. Bed on and cap with a felt pad not less than 1/8 inch (3.2 mm) or more than 1/4 inch (6.4 mm) in thickness.

Section 2114.19.4.4 Testing the equipment. The loading head shall completely cover the bearing area of the specimen and the applied load shall be transmitted through a spherical bearing block of proper design. The speed of the moving head of the testing machine shall not be more than 0.05 inches (1.27 mm) per minute.

Section 2114.19.4.5 Reporting results. Calculate the average compressive strength of the specimens tested and report this as the compressive strength of the block. Adobe units shall have an average wet compressive strength of 300 psi (2068 kPa). Five samples shall be tested and no individual unit may have a wet compressive strength of less than 250 psi (1724 kPa).

Section 2114.19.5 Modulus of rupture. Adobe units shall have an average modulus of rupture of 50 psi (345 kPa) when tested in accordance with the following procedure. Five samples shall be tested and no individual unit shall have a modulus of rupture less than 35 psi (241 kPa).

Section 2114.19.5.1 Support conditions. A cured unit shall be simply supported by 2-inch-diameter (51 mm) cylindrical supports located 2 inches (51 mm) in from each end and extending the full width of the unit.

Section 2114.19.5.2 Loading conditions. A 2-inch-diameter (51 mm) cylinder shall be placed at midspan parallel to the supports.

Section 2114.19.5.3 Testing procedure. A vertical load shall be applied to the cylinder at the rate of 500 pounds per minute (37 N/s) until failure occurs.

Section 2114.19.5.4 Modulus of rupture determination. The modulus of rupture shall be determined by the formula:

Equation 2116.3.1.3.4-1

$$Fr = 3WLs/2bt^2$$

Where, for purposes of this section only:

b = Width of the test specimen measured parallel to the loading cylinder, inches (mm).

Fr = Modulus of rupture, psi (Mpa).

Ls = Distance between supports, inches (mm).

- t = Thickness of the test specimen measured parallel to the direction of load, inches (mm).
- W = Th applied load at failure, pounds (N).

Section 2114.19.6 Absorption less than 2.5 %. A 4-inch (102 mm) cube, cut from an adobe unit fired to a constant weight in a ventilated oven at 212 ° F. to 239° F, shall not absorb more than 2 ½ percent moisture by weight when placed upon a constantly water-saturated, porous surface for 7 days. A minimum of five specimens shall be tested and each specimen shall be cut from a separate unit.

Section 2114.19.7 Absorption less than 5.0 %. A 4-inch (102 mm) cube, cut from an adobe unit fired to a constant weight in a ventilated oven at 212° F. to 239° F., shall not absorb more than 2 ½ percent moisture by weight when placed upon a constantly water-saturated, porous surface for 7 days. A minimum of five specimens shall be tested and each specimen shall be cut from a separate unit.

Section 2114.19.8 Additional requirements. All earthen units shall meet the following requirements.

Section 2114.19.8.1 Moisture content requirements. Earthen units shall have a moisture content not exceeding 4 percent by weight at the time of use.

Section 2114.19.8.2 Shrinkage cracks. All earthen units shall not contain more than three shrinkage cracks and any single shrinkage crack shall not exceed 3 inches (76 mm) in length or 1/8 inch (3.2 mm) in width.

Section 2114.19.8.3 Soil requirements. Soil used for moisture resisting adobe units and mortar shall be chemically compatible with the stabilizing material. The soil shall contain sufficient clay to bind the particles together without the aid of stabilizers. The soil shall contain not more than 0.2 percent of water-soluble salts.

Section 2114.19.9 Cement stabilized Rammed Earth. Cement stabilized Rammed Earth shall meet the following standards. The installer of the wall system shall comply with the requirements of Section 2114.19.2 for frequency testing.

Section 2114.19.9.1 Testing before construction. The installer of cement stabilized Rammed Earth shall provide the following testing before issuance of a building permit.

Section 2114.19.9.2 Materials from a licensed sand and gravel producer. A copy of Proctor ASTM D 698 shall be provided for each soil type and source or combination of sources. Periodic testing as provided by the supplier may be supplied to meet this requirement. The soil shall contain not more than 0.2 percent of water-soluble salts.

Section 2114.19.9.3 Material mined and mixed on site. A copy of ASTM D 698, ASTM C 117, ASTM C 136, and ASTM D 4318 shall be provided for each soil type and source or combination of sources. Such tests shall be repeated as required to assure that all materials to be used have been tested and are represented by the tests. The soil shall contain not more than 0.2 percent of water-soluble salts.

Section 2114.19.9.4 Testing required during construction. The installer of cement stabilized Rammed Earth shall provide the following tests made during the construction process. A certified testing laboratory shall provide field density tests for comparison to the pre-construction Proctor ASTM D 698, percent moisture ASTM D2216, dry density ASTM D 698, and percent moisture ASTM D 1556.

Cement stabilized Rammed Earth walls shall meet or exceed 95% maximum dry density (ASTM S 698). Samples taken from the wall shall exceed 300 psi compression (ASTM D1633) 14 days after placement.

Section 2308.10.1 Wind uplift. REVISE section by DELETING the paragraph and REPLACING it with the following:

Uplift resistance shall be determined by either **Method 1** or **2**.

Method 1 Design-based wind uplift criteria. Wind uplift requirements shall be determined by using the design wind value of 110 mph within Table 2308.10.1 for the continuous load path transmitting the uplift forces from the rafter or truss tied to the foundation.

Method 2 Prescriptive-based wind uplift criteria (Please note that the requirements of this section are in addition to those required for the structural connection of wood members).

Method 2.1 Conventionally-framed wood or cold-formed steel structures. All bearing wall vertical connections provide a continuous load path from the joist or truss through the ledger or top plate to the bottom plate with approved structural sheathing or approved clips. Where clips are used, they shall be minimum Simpson H2.5 (A34 at ledger), or equivalent load capacity, or configuration to match connection and spaced at intervals not to exceed 24". At openings, lower cripple studs do not require clipping but king/trimmer studs require double clips at bottom and upper cripples require both full clipping to header as well as header to king stud. All platform framing requires either strapping listed for the purpose or continuous sheathing over rim joist from stud to stud vertically at each floor level.

Method 2.2 Masonry or concrete structures. If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this section.

Method 2.2.1 Roof bearing on wall top plate. Top plates shall be secured to masonry or concrete walls with minimum 0.5" embedded anchor bolts spaced at intervals not to exceed 48". Each joist or truss shall be clipped to plate at bearing with minimum Simpson H2.5 or equivalent load capacity and of configuration to match connection. Gable end joists or trusses shall also be clipped at intervals not to exceed 48".

Method 2.2.2 Roof bearing on wall ledger. Joists or trusses both parallel or perpendicular to a wall ledger shall be secured to masonry or concrete walls with minimum Simpson PAI23 purlin anchors or equal with equivalent load capacity listed for the application and embedded into wall per listing at intervals not to exceed 48".

Method 2.3 Structural steel structures. Structural steel buildings shall have roof members attached by either welds, bolts or other similarly approved connections at intervals not to exceed 48". Ledger designs shall connect to roof trusses with strapping listed for the purpose at intervals not to exceed 48" on all diaphragm sides. If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this section.

Section 2406.3 Hazardous locations. REVISE section by DELETING items 5 and 6 and REPLACING them with the following:

5. Glazing in rooms containing hot tubs, whirlpools, saunas, steam rooms, bathtubs, or showers where the bottom exposed edge of the glazing is less than 60 inches above a standing surface.
6. Glazing, in an individual fixed or operable panel adjacent to a door where the nearest exposed edge of the glazing is within a 24 inch arc of either vertical edge of the door in the closed position and where the bottom edge of the glazing is within a 36 inch arc of either vertical edge of the door in the closed position and where the bottom edge of the glazing is less than 18 inches above the walking surface (ARS 36-1631).

Table 2902.1 number 2 and 6. REVISE as follows:

Service sinks shall not be required for business and mercantile occupancies equal to or less than 1500 square feet.

Section 3109 Swimming pool enclosures and Safety Devices. REVISE as follows:

Section 3109.2 Swimming Pools. REVISE section by DELETING text and REPLACING as follows:

A body of water intended for swimming, eighteen or more inches in depth at any point and eight feet or more in length or width.

Section 3109.3 Public swimming pool. REVISE section by DELETING the fence height of “4 feet” and REPLACING it with “5 feet”.

Section 3109.4 Residential swimming pool. REVISE section by DELETING this section and subsections 3109.4.1 through 3109.4.1.9 and REPLACE with the following:

Section 3109.4 Residential swimming pool enclosures; requirements; exceptions.

1. A swimming pool, as defined in amended Section 3109.2, whether above ground or below ground, shall be protected by an enclosure surrounding the pool area as provided in this section and shall meet the following requirements:
 - A. Be entirely enclosed by at least a five-foot wall, fence or other barrier as measured on the exterior side of the wall, fence or barrier.
 - B. Have no openings in the wall, fence or barrier through which a spherical object four inches in diameter can pass. The horizontal components of any wall, fence or barrier shall be spaced not less than forty-five inches apart measures vertically or shall be placed on the pool side of a wall, fence or barrier in which shall not have any opening in the vertical components (vertical rails) greater than one and three-quarter inches measured horizontally. Wire mesh or chain link fences shall a maximum mesh size of one and three-quarter inches measured horizontally.
 - C. Gates for the enclosure shall be self-closing and self-latching with a latch located at least 54 inches above the underlying ground or on the pool side of the gate with a release mechanism at least five inches below the top of the gate and no openings greater than one-half inch within 24 inches of the release. The gate shall open outward from the pool.
 - D. The wall, fence or barrier shall not contain openings, handholds or footholds accessible from the exterior side of the enclosure that can be used to climb the wall, fence or barrier.
 - E. The wall, fence or barrier shall be at least 20 inches from the water’s edge.
2. The residence or living area cannot constitute part of the enclosure required by Section 3109.4 for a swimming pool or other contained body of water except in the case of indoor pools, or if there are no operable openings exceeding four inches in the

wall of the building that is being used as an enclosure. If there are openings greater than four inches from the residence to the pool area, one of the following is required:

- A. Between the swimming pool or other contained body of water and the residence or living area, a minimum four foot wall, fence or barrier to the pool area which meets all of the requirements of Subsection 1, paragraphs A through E **OR**
- B. The pool shall be equipped with a power safety cover that complies with ASTM F 1346 **OR**
- C. The swimming pool shall be an above ground swimming pool, which has non-climbable exterior sides, which are a minimum height of four feet. Any access ladder or steps shall be removable with out tools and secured in an inaccessible position with a latching device not less than 54 inches above the ground when the pool is not in use.

Section 3109.4.2 Indoor swimming pools. REVISE section by DELETING text and REPLACING with the following:

All doors with direct access to the swimming pool or other contained body of water shall be equipped with a self-latching device which meets the requirements of subsection 1, paragraph C. All other openable dwelling unit or guest room windows with similar access shall be equipped with a screwed in-place wire mesh screen or a keyed lock that prevents opening the window more than four inches, or a latching device located not less than 54 inches above the floor. Emergency escape or rescue windows that adjoin the pool area are not permitted.

Section 3303.1. Construction Documents. MOVE this section to 3303.1.1. REPLACE the text in section 3303.1 to read as follows:

Section 3303.1 Purpose. The purpose of the section is two-fold. First, it is intended to insure that the safety and health of the public is protected during and after demolition of existing structures. Second, it is intended to insure within the historic central core of the City that there will be a preliminary review of proposed demolitions to determine whether any affect historical structures. Where there is a potential impact, this section will allow the City sufficient time to document the historical status and characteristics so that they are not irretrievable lost and, where appropriate, seek to preserve the most significant structures.

ADD new Section 3303.1.1 to read:

Section 3303.1.1. Construction Documents. Construction documents and a schedule for demolition must be submitted when required by the building official. Where such information is required, no work shall be done until such construction documents or schedule, or both, are approved.

ADD new Section 3303.1.2 to read:

Section 3303.1.3 Application. An application for a demolition permit shall contain the following:

1. The address of the property and the name of the owner of the property.
2. The date of initial construction and the date(s) of any substantial additions or alterations to the structure.
3. The person or company responsible for the demolition.
4. The square footage of the structure to be demolished.
5. A revised site plan showing the property after demolition of the structure.
6. A description of the principal use of the structure or the last use permitted by a certificate of occupancy for the structure.
7. Documentation that the disconnection and capping of all utilities has been provided for following demolition.
8. Description of the safeguards to be provided to protect the public during and following demolition, including documentation of the treatment of asbestos by submitting a copy of the form provided to Pima County Department of Environmental control titled Demolition/renovation asbestos NESHAP exemption. The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by this chapter.
9. Description of the provisions to ensure that all building debris, trash, junk, dead organic materials, rodent harborage, combustible material, and any other material that may constitute a threat to public health and safety will be removed from the site no later than thirty (30) days after demolition.
10. A description of how the property will be stabilized following demolition in a manner that will provide protection from safety and environmental hazards, including stabilization of the soil to prevent erosion or dust.
11. A statement of the reason for the demolition.
12. The date for completion of the demolition.

Section 3303.2 Pedestrian Protection. DELETE text from section and REPLACE as follows:

Section 3303.2 Notice. At least fifteen (15) days prior to the start of demolition, the applicant shall provide notice to the adjacent property owners of the proposed demolition. Confirmation of the notice may be submitted with the application.

Section 3303.4 Vacant Lot. DELETE text from section and REPLACE as follows:

Section 3303.4 Finished Site Requirements. No later than thirty (30) days following demolition, all building debris, trash, junk, dead organic materials, rodent harborage, combustible material, and any other material that may constitute a threat to public health and safety will be removed from the site and the site shall be stabilized to provide protection from safety and environmental hazards, including stabilization of the soil to prevent erosion or dust.

Section 3303.6 Utility Connections. DELETE text from section and REPLACE as follows:

Section 3303.6 Utility disconnections. Prior to the demolition, the applicant shall demonstrate to the satisfaction of the Building Official, that all necessary utility disconnections have been arranged and that necessary provisions have been made to ensure the safety of the property.

ADD new Section 3303.7 to read:

Section 3303.7 Demolition in the Historic Central Core. Any demolition of a building, structure or building service that is wholly or partially more than forty-five (45) years old within the area that compromised the city limits for the City of Tucson as of October 6, 1953, the “Historic Central Core”, shall be reviewed to determine whether the building, structure or building service provides historic or architectural resources in its original setting, placement and appearance that is important to the preservation of the history of the City’s development and character as provided in this section.

1. Statement of historic and architectural features and context. A survey shall be prepared of the properties within 300 feet of the proposed demolition to establish the historical and architectural features and context for the area. The survey shall included the date of construction for the structure to be demolished and structures in the survey area, any common architectural features, designs or attributes, any historical events which occurred in the survey area, or whether there are any homes of historic figures in the survey area. The survey may be prepared by the applicant and submitted with the application. They City may accept the survey, request additional information or conduct its own survey prior to acceptance of the application.
2. Applications shall be reviewed by the Plans Review Subcommittee of the Tucson/Pima County Historical Commission, which shall provide a recommendation on whether the proposed demolition has any impact on the history and architecture of the Historic Central Core. The Plans Review Subcommittee of the Tucson/Pima County Historical Commission shall make its recommendation no later than thirty (30) days after the application is accepted by the City unless the applicant agrees to additional time for its consideration.
3. Within thirty (30) days of the recommendation from the Plans Review Subcommittee of the Tucson Pima County Historical Commission, the Building Official shall decide whether to approve the demolition permit subject to the following:
 - A. The Building Official may delay the demolition for no more than 90 days in order to document important historical features.

- B. The Building Official may delay the demolition for no more than 180 days for significant historical structures to provide the City with time to preserve the structure either by purchasing or arranging the purchase of the property or structure.

3.Compliance with the provisions of Sec. 2.8.8.7 or Sec. 2.8.10.7 of the Land Use Code will satisfy the requirements of this section.

ADD new Section 3303.8 to read:

Section 3303.8 Bond. The Building Official may require a bond to be posted in an amount sufficient to insure that the site will be stabilized following the demolition.

ADD new Section 3303.9 to read:

Section 3303.9 Emergency Demolition. If the structured has been determined by the Building Official to be an imminent hazard to public safety and repairs would be impractical, emergency demolition procedures to be followed will be in accordance with the requirements for such sites and structured of Chapter 6 of the Tucson Code. Refer to Development Standard 4-01.0 for information on these procedures.

ADOPT **Appendix E** (Supplemental Accessibility Requirements), **G** (Flood-resistant Construction), **I** (Patio Covers), and **J**.

Appendix J Grading. REVISE this section by ADDING a second paragraph to **J109.1 General** as follows:

Unless otherwise recommended by a registered design professional, drainage facilities and terracing shall be provided in accordance with the requirements of this section.

The City of Tucson Development Standard 11-01.0 is hereby adopted into Appendix J.